

"Dedicated to Public Service"

THE RADIATOR



W6RHC
IRL #8170
Echolink #322788



<http://www.gearsw6rhc.org>

P.O.Box 508 Chico, CA 95927-0508

Founded: August 13, 1939

NOVEMBER, 2015

Coming Events

O.A.R.S. GENERAL MEETING

Second Friday, every month, at 7:00 p.m., at St. Paul's Church Parrish Hall, 1430 Pine St., Oroville

G.A.R.S. Second Wednesday, each month, General Meeting, Lutheran Church Hall, Artois; 7:00

G.E.A.R.S General Meeting, third Friday each month, at Butte County Search and Rescue Building, Chico. Doors open at 6:30 p.m.

Butte A.R.E.S. MEET: fourth Friday, monthly, at Butte County Search and Rescue Building.

FCC EXAMS - GEARS VEC

First Sunday of every even numbered month.

At the Butte County Search and Rescue Building. Written test at 2:00 p.m. For information or pre-registration call Tom Rider -W6JS; 530-893-9211

Club Events:

News and items of interest
GEARS Calendar...all inside.

Website: www.gearsw6rhc.org



Picture courtesy EVARC

The Prez' Says:

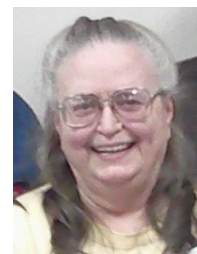
Good Grief, Charlie Brown missed the Great Pumpkin - --AGAIN. It is now November and the year is fast running down. I managed to find three hardy souls to serve as our nominating committee.

Thank you Gene Wright, Dale Anderson and Michael Favor. Good luck finding willing people to run for our offices. Thank you also goes to Gene for arranging the November program. Joe from the OARS group will be telling us about JT65; digital mode transceivers.

The Board of Directors, in an effort to recruit younger members, has come up with a "Student" membership. With proof, any student at any school, under the age of 21 may join GEARS for just \$10 per year starting in 2016. We will be voting (show of hands) to adopt this move at the November meeting. Come join us.

The IRLP is now functional. Our guru/geek Michael Favor discovered some soldering errors in the construction and has repaired same. Try it out.

Gene Wright also reports that his class for technicians [it's his class since he is the certified instructor] is doing well. Two new hams have been produced and we may get another 4-5 out of the class. Let's keep our fingers crossed. And try to find friends or neighbors who might be interested in becoming hams. We can always find room for more people on the airwaves.



Continued page 5

Board of Directors Meeting: Oct 16 2015

ATTENDANCE Scott not present.

MEMBERSHIP APPLICATIONS:

New, Robert Rentz and David Ramsey. 31 renewals.

Bills: Phone bill \$44 paid.

OLD BUSINESS:

IRLP: Scott Peterson and Michael Favor are making progress on the system to get it working again.

Steven to update application form on the GEARS web site to reflect modifications of removal of birth-day and anniversary lines and removal of roster and newsletter lines in the office use only.

The addition of a student member with an ID required.

NEW BUSINESS:

ADJOURNMENT: 19:02 hr.

Dale Anderson,
Secretary

MINUTES OF GENERAL MEETING for Oct 16 2015

PROGRAM: Programming your HT by Albert Leyva.

Next month program will be Digital Mode JT65.

ATTENDANCE: All present.

ANNOUNCEMENT:

The addition of a student membership for a fee of \$10 for those with a student ID (grammar, high or collage).

VEC: 2 students have passed their tech level exams. The other students are doing will.

MINUTES: Approved the minutes from September meeting.

TREASURER: Pay outs of phone \$43 and power \$23. Current balance of \$2402.84.

OLD BUSINESS:

Animal rescue: Airport event went well.

NEW BUSINESS:

Nominations committee. Michael Favor, Gene Wright and Dale Anderson.

ADJOURNMENT: 20:32 hr.





GEARS Meet-a-Member – Larry Marcum

Larry Marcum, KA6GND, has been a ham for fifty years. His first rig was a “Benton Harbor Lunchbox”, Heath-kit Two-er. The Two-er was “rock-bound”, and to change the frequency, you had to remove the cover from the case and replace the crystal inside, provided you even had the correct crystal for the desired frequency. Larry modified his with an external crystal socket, so at least he didn’t have to take the cover off every time.

These days Larry enjoys a scheduled weekly CW QSO on 40 meters with WA6VWW, a ham friend he’s known for 25 years. He’s working on improving his CW code speed, without pencil and paper, from his current 18 wpm up to about 25 wpm. He’s also interested in learning more about some of the new ham radio digital modes.

Due to the location of his home, not far from the GEARS repeater, Larry has an excellent VHF signal path to most of the Sacramento Valley all the way up to Redding. Larry often monitors the GEARS repeater, as well as the 2-meter National Simplex Calling frequency, 146.520 Mhz. On Thursdays at 7:30 PM, Larry usually hosts a simplex net on 146.520 MHz, and all local area hams are invited to check in. The simplex net offers an excellent opportunity to check how your station performs without using the repeater.

Larry lives in Forest Ranch, with his charming wife Ida, and their three cats, and Larry’s seeing-eye dog, Brinkley. Their 2 acre homestead is nestled in the pine trees, and includes a tidy house, and a cozy little barn which houses several cute-as-pie pygmy goats, and a good number of egg-laying chickens. They also cultivate a thriving garden, which Ida has been carefully irrigating by hand to conserve water. The garden includes all kinds of herbs and vegetables, plus a wide variety of trees and ornamental plants.

Before Larry married Ida he used to eat simple bachelor food for dinner, like Hamburger Helper, and canned vegetables. But Ida is a gourmet cook, and now Larry enjoys her wonderful home-cooked meals made with fresh vegetables from the garden. Hamburger Helper has been banished from the house. Larry says Ida has converted him from a man who had “a very limited culinary palette”, to a man who now enjoys every kind of vegetable imaginable, and who will gladly try everything Ida recommends (except liver).

Larry and Ida’s happy marriage is a “Match dot com success story”. Some time had passed since Larry had lost Bonnie, his first wife of 32 years, after a long illness due to complications from cancer, and he finally decided it was time to move forward and give happiness another try.

Ida’s family insisted on signing her up for the dating site, when she didn’t even have a computer because, they said, she was simply too young and vivacious to live out the rest of her days as a single woman. And as soon as Larry had the chance to meet her, he agreed. Both Larry and Ida had only planned to give the dating website a try for a short time, but for them, that’s all it took.

Larry tells Ida he loves her several times every day, and she says the same to him, and they really mean it. Perhaps the story of their romance shows, even later in life, it’s never too late to take another bite at the apple. Larry and Ida didn’t give up on love, and they found true happiness again together with each other.

In the years before he moved to Forest Ranch, Larry worked for the Hughes Aircraft Company for over 20 years, in the print-shop. He got interested in printing after a shop class in high school. After he graduated he was hired for an entry-level print-shop position at Hughes. Larry took a few college classes, did some studying on his own, and eventually rose through the ranks to become the print-shop supervisor. When Hughes shut down their in-house printing-press operation in 1990 due to cutbacks in the aerospace industry, Larry bought a small commercial printing business in Riverside. A short time later he set up a website so hams could order custom QSL cards online, and that eventually grew into the majority of his printing business.

After several years as a successful small business owner, the creeping onset of Retinitis Pigmentosa (RP) slowly began to steal Larry’s eyesight, eventually forcing his retirement from the printing profession. RP causes a progressive visual impairment that darkens the edges of the visual field, and will eventually cause complete blindness. Larry’s current field of view is just enough to see one or two letters on a computer screen, or one digit on his radio display, and he knows that even that small remaining window of eyesight will not last forever.

But, to paraphrase Stevie Wonder, a man can lose his eyesight without losing his vision. Larry remains optimistic, happy, and fiercely independent. He refuses to let the visual impairment stop him from being a very energetic and productive member of the community. And he doesn’t let it spoil his upbeat attitude and his enjoyment of life.

(continued on page 4)

Of course, Larry can't drive his own pickup truck anymore. His friendly seeing-eye dog, Brinkley, is bigger than average, and can help him get around in many situations, but in the pickup truck, Brinkley's feet can barely reach the pedals, so Ida does most of the driving; and Ida doesn't want Larry climbing up on the roof to work on ham radio antennas anymore, but he still cuts and splits firewood with a his own chainsaw and power log-splitter. Not much slows him down.

Larry constantly finds creative new solutions to overcome the challenges of his visual impairment. During the interview for this article, he described an idea for a pocket-sized audio beacon to help him maintain his orientation and sense of position while working around his large yard. His description inspired me to build a prototype of the gadget, which Larry has successfully tested and refined. The gadget may end up becoming an entrepreneurial project that could eventually help many other visually impaired people to navigate in large outdoor environments, giving them greater hands-free independence and freedom of movement, without the need to hold onto a seeing-eye dog harness or a white cane. Stay tuned for more on this story as it develops.

For many years, Larry has volunteered his energy and talent to Lions Club, serving as the local President, and eventually rising to Lions District Governor, a high-level position which required a lot of travel. He provided leadership for 46 Lions Clubs in Northern California, and represented those 1100 members at national-level Lions events.

Larry revealed that his wife Ida was recently named Lion of the Year. I discovered on my own that a few years ago Larry was also named District Lion of the Year. He forgot to mention that. Larry and Ida are still very active in the Lions Club today. Ida recently baked enough brownies, pies, cookies, and cupcakes to provision an entire Lions fundraiser. I had opportunity to buy a variety of those treats before they sold out, and they were all delicious.

Once a month, Ida also cooks a free dinner for dozens of people, and hosts the event at the Forest Ranch community center. The program is called "Meals from the Heart". It offers a little help to lower income families, and gives older neighbors, who may live alone, a good reason to get out of the house and enjoy a delicious hot meal with their other members of the community. Everyone is invited, and the program is funded entirely by donations.

As many of you know, Larry also independently conceived, organized, and produced his third-annual "Insightful Day", a one-day program to introduce and present all kinds of products and services available to help visually impaired people, from demonstrations of seeing-eye dogs, to computer screen-readers, to Braille measuring cups for cooking, and everything in between. Many local Lion Club members were on hand to help out.

When I asked Larry how he and Ida maintain such a positive attitude, he told me that they just wake up happy every morning, feeling thankful for the simple things in life, like sitting outside on the deck in the morning with a fresh cup of hot coffee. But Larry says what he enjoys most is having the opportunity to help other people, and contribute his energy to worthy organizations and causes.

When I asked for some final words of wisdom, Larry said: *"Every new day is a precious gift; open it, and cherish it."*

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Disclaimer: In the interest of full disclosure, I would like to reassure everyone that this author's depiction of Larry was not unfairly biased in any way by his generous gift to me of a complete, cool-looking Butternut 6-band HF vertical antenna, which had apparently been gathering dust under his porch. After struggling a little bit with the Butternut, I noticed that Larry actually used a very elegant "fan-dipole" antenna himself. So I tried building a fan-dipole, which works great. If anyone would like to adopt a free, cool-looking Butternut 6-band HF vertical antenna, please call me.



Article by:

Michael Favor-N6FAV



A new Heathkit! So, why am I not excited?

By Dan Romanchik, KB6NU

A couple of weeks ago I got an e-mail from Heathkit. Yes, the NEW Heathkit. you might remember that a couple of years ago, there was all this hype about a "new" Heathkit and how they were going to start designing new kits as well as revive popular old designs.

Then, nothing. They went completely quiet—until a couple of weeks ago. In an e-mail sent to their "insiders," they say:

"Dear Heathkit Insider,

'What I really hope Heathkit will produce,' a Silicon Valley colleague recently told me, 'is a new radio kit with a beautiful finish, maybe in rosewood.' Something great to enjoy building and learn from, and also visually stunning, so he could put it in his living room and keep it forever.

"Today, my friend gets his wish.

They then go on to explain all of the work they've been doing in relocating Heathkit to Santa Cruz, CA, acquiring a second company, and securing all the intellectual property rights to the old Heathkit manuals and logos (meaning no more bootleg copies on the Internet). The e-mail continues:

"That's a lot, but there's more. We've designed and developed a wide range of entirely new kit products. We authored the manuals for these kits, complete with the beautiful line art you rely on, preserving and respecting our iconic historic Heathkit style. We developed many new inventions and filed patents on them.....We built the back office infrastructure, vendor and supply chain relationships, systems, procedures, operations methods, and well-thought-out corporate structure that a manufacturing company needs to support its customers, to allow us to scale instantly the day we resume major kit sales. All this effort enables us to introduce a fleet of new kits and helps ensure Heathkit can grow, prosper, and continue to bring you great new products for a very long time."

So, what's the exciting news? A new QRP transceiver? Maybe a shortwave radio? A new 100-in-1 experimenter kit for Makers? (go to page 9)

PREZ SAYS (con't)

If any of you out there has a dead Yaesu 897D they want to get rid of, CALL ME. The readout on my radio is kaput and Yaesu does NOT support outdated radios. We have found one in Taiwan for \$116+ s&h. OUCH!!

I didn't have much for this month, guess I'm tired of writing for this column, or maybe I'm just tired of being sick and tired. I finally have a diagnosis and treatment is ongoing. Hope it works.

Until I need a special bulletin or the November meeting: good radio to you all.

Anna



Caps embroidered with your name and your call sign may be ordered by contacting WA6ZRT -Gene Telephone #530 -345-3515

VEC TESTING

2:00 p.m.

October 4, 2015

December 6, 2015

AT BUTTE COUNTY SEARCH & RESCUE BUILDING

All Classes
Technician, General and
Extra.

Contact:

Tom Rider-W6JS

530-893-9211

Rustyboyrider@aol.com

A GENERAL GUIDE TO SOLDERS

Soft Solders (non-precious metal solders) Solder Properties

Melt Temp

Tix Solder-

Hardest soft solder on earth. Has a holding power of 4300 PSI. Adheres to all ordinary solderable materials and works with gun, iron, torch or soldering machine. Stays white and does not tarnish.

275° F

Low Temperature Solder

Excellent for use at low temperature. Contains no lead or corrosive materials. Easy to use, paste dispenser contains the proper amount of solder and flux. Five Times as strong as ordinary solder and will not tarnish.

430 ° F

Lead Free Solder

Excellent for use in any soft solder applications. Does not contain any lead, antimony or zinc. Free flowing and produces a bright white finish.

Pewter Solder Paste

Allows user to solder and repair. Corrosion resistant, with excellent color matching abilities, it is stronger than pot metal. Great for pewter objects.

400° F

Copper Bearing Solder Paste

No additional flux is required with this specially formulated paste for use with copper, brass, nickel or bronze. Contains no cadmium or antimony. Flows smoothly.

430° F

Aluminum Solder Paste

A great new method for soldering aluminum, this paste melts far below the melting point of aluminum or any other metal.

395° F

NEXT PAGE

HARD SOLDERS (PRECIOUS METAL SOLDERS)

**Stay-Brite Solder (a kit)
(a 1# Spool solder)**

High Strength Silver bearing solder. Provides strength without distortion caused by high temperature brazing. Diameter of solder is 3/64" .

430° F

Solder Paste with Flux

Ingenious dispenser contains solder with flux. The proper amount of solder and flux can be placed at the exact point required, eliminating waste and improving the appearance of the joint Solder contains no cadmium.

**Very easy Silver –450° F
Easy Silver-1240° F**

**Medium Silver-1275° F
Hard Silver– 1365° F
Yellow Gold -1265° F
White Gold—1160° F**

“N” Brand Gold Solders

Superior Color, ductability and strength. All are easy flowing. Match Karat to the work being soldered.

**Low K White-1390° F
10 K White-1410° F
14K White-1430° F
Low K Yellow 1325° F
8K Yellow-1385° F
10K Yellow-1320° F
12K Yellow-1275° F
14K Yellow-1325° F**

Clipped Gold Solders-

Usually 1mm square flat pieces.

Clipped Silver Solder

1 mm pieces

Silver Solders

Available in sheets and wire coils. Sheets usually 1/4 ounce. wires 1 ounce

**Hard sheet-1365° F
Easy Flo Wire –1325° F
Easy Wire –1240° F
Medium Wire-1275° F
Hard Wire-1365° F**

Silver Alloy Soldering Rods

Ideal for non-precious and gold filled jewelry, alloy rods have flux core, eliminating need for additional flux for cleaning agents-provide strong permanent bond

1275 ° F

See page 9

The GEARS Newsletter Staff:**Editor and Publisher**.....Dorothy Post**Printing & Distribution** snail mail: Evelyn Weir**Website**...Stephen McDermott W6AKF

The Radiator is a monthly publication of the Golden Empire Amateur Radio Society (GEARS). It is the policy of the Editor to publish all material submitted by the membership provided such material is in good taste, relevant to amateur radio, of interest to GEARS members, and space is available. Please send all submissions to the Editor – Dorothy Post by the last day of the month through the following medium: E-mail: dj@posthouse.us

Club Officers: (Board of Directors)

PresidentAnna Horn –KG6ZOA

Vice President..... Scott Petersen-KE6VUS

SecretaryDale Anderson-KK6EVX

TreasurerRick Hubbard-KI6VOS

Past PresidentGene Wright-WA6ZRT

Director..... Tom Rider-W6JS

Director.....Stephen McDermott W6AKF

Director.....Stephen Wolske-KF6HSS

Club Meetings**General Meeting Third Friday 7:00 PM****Board Meeting Third Friday 6:00 PM****GEARS Club Net****Tuesdays 8:00 PM 146.850 MHz-PL 110.9****GARS Club Net: Monday, 19:30 147.105+Mhz PL 110.0****Sacramento Valley Traffic Net****Nightly 9:00 PM 146.850 MHz-PL 110.9****ARES Nets:****Butte Mondays 20:00 146.850 MHz-PL 110.9****Yuba Sutter Thursdays 19:00 146.085+MHz PL 127.3****Glenn Thursday 19:30 147.105 MHz +PL 100.0****Other Nets:****Sac Valley Section Net—7:00 PM 2nd Wed of the month 146.085 MHz+PL 127.3****440 Wed. Night 8:00 PM Wednesday 440.650 MHz****Golden Bear 7:00 PM Daily 3975 kHz****Willie Net 8:00 PM Mondays 1930 kHz****Western Public Service System (WPSS)****Winter 5:00 – 7:30 PM 3952 kHz****Summer 6:00 – 8:30 PM 3952 kHz****ARISS (International Space Station) Uplink 144.490 MHz Downlink 145.800 MHz****Hope-1 satellite: all uplinks are in 145Mhz band:****All downlinks are in 435Mhz band****...California Traffic Net: 3906 KHz nightly @6:00 pm****For traffic listing & @6:30 p.m. for roll call.****Solders continued from page 7**

Gold-based alloys are used in high reliability applications, such as hermetic sealing, aerospace, and medical. These alloys have a high tensile strength, superior thermal fatigue resistance, exceptional thermal conductivity, as well as resistance to corrosion and oxidation.

Unique Traits of Gold -Reliability-Strength-Corrosion-resistant. Inert Applications: Ultra-high reliability for joining and sealing; Fluxless soldering processes; Hermetic sealing; Joining gold-plated surfaces.

Advantages ;Highest tensile strength of any solder; High melting point is compatible with subsequent reflow processes; Pb-free; Superior thermal conductivity; Resistance to corrosion; Superior thermal fatigue resistance; Good joint strength; Excellent wetting properties; Resistance to oxidation

Low temperature solders include indium- and bismuth-containing alloys such as bismuth-tin (BiSn). They are available as solder preforms, solder paste, solder wire, ingot, or solder ribbon. Applications for low temperature alloys include: soldering temperature sensitive components; step soldering; soldering LEDs. **Indium-containing alloys** can be used for cryogenic applications, TCE mismatch, and applications that need improved thermal fatigue performance. **Solders that are liquid** at room temperature. Also referred to as liquid metal, these gallium-containing solders can melt at temperatures as low as 7°C. .

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I am told the article on Solders may be of only borderline interest to ham radio operators unless the Ham is interested in Makers or Arduino projects or possibly rebuilding computers. If so, I apologize for being too far afield on a subject of Ham Radio interest.

This following request also has nothing to do with Ham Radio, except in relation to my usage of the item in question when I am prepping the newsletter: If any of you have, or know of anyone who possesses a DELL Color Laser 3000 cn printer: I have one such printer which after many years of dedicated service has given up and refuses to be repaired,. The drum gave out, I replaced the chip in the drum...have done that twice before and it worked...but not this time. A new drum did not work either, at which time I, desperate for a working color laser gave up and ordered a new printer.

Problem is, the old 3000cn is selfishly refusing to upchuck **three new toners** safely tucked inside it's now broken body, and **one new toner package** sits by observing the drama. I do not want to just throw away all that good unused tonerso anyone who can use the toner, and who is willing to relieve me of the old 3000cn now harboring it's pot of gold, so to speak, contact me and it is yours.

Dorothy 530 865 0260

Sunday, December 6, 2015	2:00 p.m.	VEC—Exams	Butte Co. Search & Rescue Building 2591 Morrow Lane, Chico	Tom Rider 530-893-9211
Wednesday November 19, 2015	Board-6:00 p.m. General Meeting 7:00 .	GARS-Glenn Glenn Amateur Radio Society General Meeting, & Amateur Radio Emergency Services	Lutheran Church Hall: 565 Main Street Artois	Albert Leyva 530-567-5979
Friday, November 13, 2015		OARS Oroville Amateur Radio Society General Meeting	St Paul's Church Parrish Hall 1430 Pine Street Oroville	Ron Osborne-kd7uhf 530 589 1834 kd7uhf@yahoo.com
Friday November 20, 2015	Board-6:00 p.m. General Meeting 7:00 Doors open 5:30 p.m. .	GEARS Golden Empire Amateur Radio Society General Meeting/Elections	Butte County Search and Rescue Building 2591 Morrow Lane Chico	Anna Horn -kg6zoo 530-877-5939

Heathkit continued:

Uh-uh. Sorry. The "exciting" news is a tuned radio frequency (TRF) AM band (yes, I said AM band) radio kit that costs \$150 (<https://shop.heathkit.com/shop/product/explorer-jr-trf-am-radio-receiver-kit-black-case-gr-150-bk-16>). Not only is that crazy expensive for an AM radio, it doesn't even come with a speaker. On top of that, there's no soldering. You screw all of the components to the board. I'm speechless (well, figuratively, not literally). I'm not sure what the target market is for this product. It's certainly not amateur radio operators, who expect a lot more (in terms of both functionality and "fun") for their money. Nor is it the "Maker" folks, who want something more challenging than an AM radio. I think that if I took this to show off at the local Ann Arbor Maker group, they'd laugh me out of the place.

I really hope that they have something better up their sleeves. A strong Heathkit would be good for the Maker movement and for ham radio

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Well, KB6NU is quite offended! What do you think? Is a beautiful AM radio kit outrageous? Too "retro"? Go to The Heathkit link above & check it out. What is your opinion?

